[0014]

The central provider 14 broadcasts a program created, sponsored or promoted illustratively by a particular commercial service provider 26. The service provider 26 is a company or an individual or group of individuals that intends to advertise a particular service or product over a network. In accordance with the present invention, telephone number data, which illustratively corresponds to a telephone number of the service provider 26, is encoded into the program. As a viewer watches the program on his/her display device 12, the telephone number data is captured by the viewer's set-top box 16. An LED indicator or a visual indicator 17 such as screen display (not shown) located on the set-top box makes an indication when telephone number data has been captured. When the viewer wishes to dial the captured telephone number, the viewer transmits an access signal to the set-top box 16. The set-top box 16 sets call to the service provider 26, illustratively by generating DTMF tones corresponding to the telephone number data. When the call is connected, the viewer can directly interact with the service provider 26.

[0018]

As described above, the telephone number data are preferably demarcated by an escape sequence that is encoded into a program when the program is recorded or transmitted. In the case of a live broadcast, the escape sequence and the telephone number data are illustratively encoded into a vertical fly-back period of at least one of video frames comprising the program. If the system transmitting the program is a digital system, the escape sequence and telephone number data are digitally encoded into a convenient portion in a digital data bitstream to be broadcast. In the case of a digital telephony protocol with out-of-band (OOB) signaling, such as ISDN, the escape sequence can be encoded into an OOB channel.